

turing typically follows three basic stages: (1) comprehensive legal and regulatory reforms, (2) commercialization and development of the existing dominant utilities, and (3) domestic and/or international private-sector investment and privatization. The linchpin for this vision is a comprehensive energy law that meets key global norms and standards. The law should define the basic structure of the sector; establish basic policies and priorities; separate the functions of policy making, ownership, and regulation; establish an independent regulator; and create a framework for private investment and ultimate privatization.

Therefore, the major aspects of energy-sector reform can be consolidated as follows:

- *Promulgation of legislation that allows unbundling and/or privatization of existing assets:* The establishment of a reordered regulatory framework and the introduction of competitive markets and commercial practices into the energy sector are preliminary steps toward privatization of existing assets.
- *Promulgation of legislation that allows private investment in the industry:* Enabling legislation is required to permit transfer of existing assets and concessions into private hands. Public access to the privatization process and information about privatization helps develop community acceptance of this step in energy-sector reform.
- *Establishment of an independent regulatory authority:* Institution building is a central aspect of energy-sector reform. Privatization of assets and competitive markets require a reordering of the regulatory framework to supervise the restructured energy sector. Critical aspects include the separation of the regulator from both the energy policy arm of government and state-owned power providers; the financial autonomy and independence of the regulator; the adequacy of the regulator's inspection and supervisory authority; and the ability of the regulator to address anticompetitive circumstances.
- *Corporatization and commercialization of existing utilities:* A considerable amount of data from many countries demonstrates that development benefits accrue when utilities are separated from other government functions and when utilities are exposed to the best commercial practices.
- *Privatization of existing assets:* The final stage in sector reforms is the implementation of privatization. A critical

issue to consider is whether the process of privatizing existing utilities is transparent and open to foreign investors, thereby enhancing both public participation and capacity building.

The Energy Governance-Finance Connection

The growth of the energy sector that is required to meet human needs hinges on attracting investment. Both debt and equity are drawn to safe havens where funds are likely to grow and provide a return on investment. Legal, regulatory, and policy regimes that ensure a stable environment (i.e., transparent and predictable political, social, and economic market rules) characterize locations in which investments can flourish. Governance actions designed to mobilize investment in the energy sector include these:

- Promoting transparency in the formulation, promulgation, and implementation of rules, regulations, and technical standards;
- Establishing nondiscriminatory third-party access to and interconnection with energy networks and grids;
- Establishing independent regulatory authorities separate from and not accountable to any supplier of energy services;
- Establishing nondiscriminatory, objective, and timely procedures for the transportation and transmission of energy;
- Requiring parties to undertake measures designed to prevent certain anticompetitive practices from occurring in energy sectors (e.g., engaging in anticompetitive cross-subsidization or using information obtained from competitors that could lead to anticompetitive results); and
- Increasing the public's understanding of the market approach to providing energy services and its knowledge of ways in which it could effectively participate in this approach.

WATER SECTOR

Fostering Governance in the Water Sector

Good governance is recognized internationally as a critical centerpiece of effective, sustainable, and integrated water management. Water managers and users alike acknowledge the need for transparent, accountable, and participatory governance to build a consensus on priority needs today and to respond to an ever-changing context in the future. Beyond immediate benefits, effective water

resource governance also offers numerous opportunities to foster the more generalized building of civil society and a culture of democratic governance in many countries.

There is no universal model for water governance appropriate for all contexts. There is, however, a growing international acceptance of several basic principles that are shared by all “good water governance” participants anywhere in the world. The following aspects are involved:

- Integrated, intersectoral, and multi-objective decision making about water resources at the basin scale, in which the relationships between groundwater and surface water; weather, climate, and hydrologic resources; water quantity and quality; land and water; and freshwater and marine systems are recognized and in which the central importance of the ecological services provided by hydrologic systems is acknowledged;
- Informed and science-based decision making, in which the public has adequate access to water resources information for an improved understanding of the water cycle;
- Broad participation and empowerment of stakeholders in water resources decision making, across sectors and social/cultural groups and especially including women;
- Strong, effective, and culturally appropriate institutional, policy, and legal frameworks (including setting standards and regulations) that reinforce integrated, accountable, participatory, and sustainable management and that minimize corruption;
- Effective coordination among sectors, between public and private participants, and across multiple geographic and institutional scales;
- Emphasis on decision making and assignment of authority at the lowest appropriate level; and
- Commitment to creating and strengthening the human and organizational capacity for sustainable and integrated water management, in both the public and private sectors.

Mobilizing Financial Resources to Manage Water Resources

Mobilizing the financial resources necessary to manage water resources is often the first and major challenge facing managers and governments around the world. The responsibility for financing the water resource infrastructure and other needs often rests with the local or national govern-

ment, although investment from private and other external sources is also frequently required.

The greatest investment gap exists in the developing world, where the current annual investment of US\$75 billion pales in the face of the total water resource needs in all sectors, estimated to be as much as US\$180 billion per year. Financing to address water investment needs in developing countries is currently drawn from a mix of sources, including these:

- Domestic public-sector financing at the national or local level (from taxes, user fees, public debt, etc.) [64% of total expenditures];
- Direct investments from domestic private sources [19% of total expenditures];
- Direct investments from international private sources [5% of total expenditures]; and
- International sources of support and cooperation (including multilateral and bilateral ODA) [12% of total expenditures].

Each of these sources has, and will continue to have, an important and distinct role to play in ensuring a sustainable and secure water future for the world. These totals tell only part of the story, since different water use sectors (e.g., agriculture, urban and rural water supply and sanitation, industry, energy, and environmental services) require unique combinations of funding that can depend more heavily on some of these sources than on others. In all sectors, however, it is clear that the majority of future investments must increasingly come from an appropriate balance of self-regenerating domestic public sources of capital as well as domestic and international private sources.

The Water Governance-Finance Connection

The themes of governance and financing for water resources management intersect at many levels. Good governance is a central precondition for the successful generation of the financial and human resources necessary for the sustainable development and management of water resources. Unfortunately, some of the countries that are most in need of additional resources lack the governance conditions that will either attract new sources of financing or ensure that public and private resources are managed in an equitable or sustainable way.

Sound governance practices create “enabling environments” that encourage good both public- and private-sector investment. Beyond providing general support to achieve good governance conditions, specific attention should be directed to efforts that reduce risk and facilitate healthy capital markets, especially domestically. Some additional guidelines on using good governance to mobilize financial resources include these:

- Water should be recognized as an economic, social, and environmental good; the full costs of water management and water services should be acknowledged; and the costs should be allocated transparently, equitably, and sufficiently throughout society (through tariffs, subsidies, taxes, etc.).
- Conditions and mechanisms of access to capital should be available at all levels (e.g., microcredit, revolving loan programs, local bond issues).
- Stable systems that provide access to water and allocate water should be available (e.g., water rights frameworks, formal and informal water markets, common property management).
- Accountable and transparent systems, the full accounting of costs and benefits, a progressive policy and legal environment, and a constructive relationship between civil society and government should be promoted to

ensure that flows of resources from all sources are generated and allocated in a way that protects the public interest, considers the needs of the full spectrum of social participants, and adequately protects ecosystems.

The responsibility for forging better water governance throughout the world, including creating the enabling environment necessary for sustainable financing, is ultimately the responsibility of local participants. However, these processes are unlikely to take hold in many places unless there are increasingly coordinated partnerships among external donors, domestic public bodies, the private sector, and civil society. In this mix, ODA serves an essential catalytic role. Targeted and strategic expenditures of development assistance funds can help advance the sustainable management of water resources through good governance. Such assistance can include supporting basin-level management structures, fostering appropriate technologies and nonstructural measures to reduce consumption and improve quality, and strengthening enabling conditions to mobilize financial resources. Such support is most effective when it is applied to local strategies that encourage innovative processes and approaches, broaden the menu of tools and options available, leverage internal and external support and investments, and build capacity in civil society and the public and private sectors.

